RESTORING FISHERIES

Any effort to restore salmonid populations within the Russian River watershed must be scientifically grounded if it is to be successful. The following projects will provide the foundation for restoration efforts within the watershed by providing important data regarding the fisheries' genetics, and spawning, rearing and migratory needs. This information, coupled with adequately funded "on-the ground" restoration efforts, will contribute greatly to the survival of these imperiled species.

CONSERVATION / SUPPLEMENTATION HATCHERY PROGRAM

Total Project Cost:
$40 Million - $50 Million

DESCRIPTION:
- Develop conceptual and design alternatives to modify existing facilities and assess conservation hatchery techniques as an alternative method to increase native fish in the Russian River watershed
- The existing facilities, Coyote Valley Fish Facility at Lake Mendocino and the Don Clausen Fish Hatchery at Lake Sonoma, are primarily production-oriented, but could function as conservation hatcheries by incorporating new conservation management strategies
- Facilities are owned by the U.S. Army Corps of Engineers and operated by California Department of Fish and Game

POTENTIAL PARTNERSHIPS:
- California Department of Fish and Game
- National Marine Fisheries Service
- Sonoma County Water Agency
- University of California, Bodega Marine Laboratory
- U.S. Army Corps of Engineers

PROJECT GOAL

Evaluate the feasibility of developing a conservation hatchery program for the Russian River, which would be used to facilitate recovery of fisheries by augmenting the numbers of native fish in the Russian River watershed.

CONSERVATION/SUPPLEMENTATION HATCHERY PROGRAM

Existing hatchery goals in the Russian River Basin are based on production to mitigate for spawning habitat that was lost following the construction of Warm Springs and Coyote Valley Dams.

Conventional fish-rearing practices have often been thought to reduce the survival of hatchery fish relative to wild fish. This issue has led to the consideration of developing physical and operational modifications to lessen the impacts of traditional hatchery practices.

The basic tenets of a conservation hatchery strategy is to raise fish under conditions similar to those found in the wild and to release these fish with a genetic background and in numbers that reduce impacts to wild stocks. Raising the fish under conditions that simulate wild rearing habitat will better prepare them to survive after they are released.

Several techniques for modifying rearing tanks have shown special promise for conservation hatchery strategies including cryptic coloration, in-water structures, natural substrate, low fish densities, predator avoidance training, underwater feeding techniques, and cover.

Don Clausen Fish Hatchery Facility at Warm Springs Dam, Sonoma County, California

Cle Ellum Supplementation and Research Facility, Yakima, Washington